IN THE CLAIMS

This listing of the claims will replace all prior versions, listings, of claims in the application:

Claims 1-6 (canceled)

Claim 7 (currently amended): A method for operation of a flowmeter that uses magnetic induction to measure only the flow rate of an electrically conductive fluid flowing through said flowmeter and provide a signal representative of said flow rate, said flowmeter having a supply for providing power to produce a magnetic field used in said flow measurement, said method comprising:

determining at a particular instance of time from said signal representative of said flow rate an instantaneous signal-to-noise ratio; and

adjusting in response to said determined instantaneous signal-to-noise ratio said power provided by said supply so that said power is supplied inversely proportional to said determined instantaneous signal-to-noise ratio.

Claim 8 (previously presented): The method of claim 7 further comprising indicating a value that represents said determined instantaneous signal-to-noise ratio.

Claim 9 (previously presented): The method of claim 7 further comprising indicating a value that represents said provided power.

Claim 10 (previously presented): The method of claim 8 further comprising indicating a value that represents said provided power.

Claim 11 (previously presented): The method of claim 7 further comprising generating a warning when said determined instantaneous signal-to-noise ratio indicates that the noise voltage has exceeded a predetermined value.

Claim 12 (previously presented): The method of claim 7 further comprising switching off said power supply when said flow rate is zero or virtually zero.

Claim 13 (currently amended): A method for operation of a

flowmeter that uses magnetic induction to measure only the flow rate of an electrically conductive fluid flowing through said flowmeter and provide a signal representative of said flow rate, said flowmeter having a supply for providing power to produce a magnetic field used in said flow measurement, said method comprising:

determining at a particular instance of time from said signal representative of said flow rate an instantaneous signal-to-noise ratio; and

adjusting in response to said determined instantaneous signal-to-noise ratio said power provided by said supply so that said supply supplies less power when said determined instantaneous signal-to-noise ratio is higher and more power when said determined instantaneous signal-to-noise ratio is lower.

Claim 14 (previously presented): The method of claim 13 further comprising indicating a value that represents said determined instantaneous signal-to-noise ratio.

Claim 15 (previously presented): The method of claim 13 further comprising indicating a value that represents said provided power.

Claim 16 (previously presented): The method of claim 14 further comprising indicating a value that represents said provided power.

Claim 17 (previously presented): The method of claim 13 further comprising generating a warning when said determined instantaneous signal-to-noise ratio indicates that the noise voltage has exceeded a predetermined value.

Claim 18 (previously presented): The method of claim 13 further comprising switching off said power supply when said flow rate is zero or virtually zero.

Claim 19 (currently amended): A method for operation of a flowmeter that uses magnetic induction to measure only the flow rate of an electrically conductive fluid flowing through said flowmeter and provide a signal representative of said flow rate,

said flowmeter having a supply for providing power to produce a magnetic field used in said flow measurement, said method comprising:

determining at a particular instance of time from said signal representative of said flow rate an instantaneous signal-to-noise ratio; and

adjusting in response to said determined instantaneous signal-to-noise ratio said power provided by said supply so that more power is supplied by said supply when said determined instantaneous signal-to-noise ratio is low than is supplied by said supply when said determined instantaneous signal-to-noise ratio is high.

Claim 20 (previously presented): The method of claim 19 further comprising indicating a value that represents said determined instantaneous signal-to-noise ratio.

Claim 21 (previously presented): The method of claim 19 further comprising indicating a value that represents said provided power.

Claim 22 (previously presented): The method of claim 20 further comprising indicating a value that represents said provided power.

Claim 23 (previously presented): The method of claim 19 further comprising generating a warning when said determined instantaneous signal-to-noise ratio indicates that the noise voltage has exceeded a predetermined value.

Claim 24 (previously presented): The method of claim 19 further comprising switching off said power supply when said flow rate is zero or virtually zero.

Claim 25 (previously presented): The method of claim 19 further comprising adjusting in response to said determined instantaneous signal-to-noise ratio said power provided by said supply so that less power is supplied by said supply when said instantaneous signal-to-noise ratio is high than is supplied by said supply when said instantaneous signal-to-noise ratio is low.